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- 22. An apparatus as claimed in claim 4 and further comprising a vibrator for demountable attachment to the master cylinder and movable to other components of the hydraulic system to be serviced for loosening sludge and corrosion by-products in the system.
- 23. A method for flushing, replacing a hydraulic fluid and bleeding a hydraulic system comprising the steps of:
 - a) replacing a cap of a master cylinder of the hydraulic system with an adapter having a master cylinder line extending through said adapter into a reservoir of the ¹⁰ master cylinder;
 - attaching a different bleeder valve line to a bleeder valve of each of a plurality of components of the hydraulic system;
 - c) opening the bleeder valves;
 - d) energizing a pump to draw a fluid from a holding vessel through a fluid selecting valve and through said pump to a flow reversing valve, said flow reversing valve having a first position wherein the fluid from said pump is supplied to said master cylinder line for movement through the hydraulic system in a first direction and returned through said bleeder valves lines and said flow reversing valve to said holding vessel, and having a second position wherein the fluid from said pump is supplied to said bleeder valves for movement through the hydraulic system in an opposite direction;
 - e) actuating said flow reversing valve between the first and second positions thereof for flushing contaminants from the hydraulic system; and
 - f) actuating said fluid selecting valve to a second position whereby said pump will draw fluid from a supply vessel of new fluid, through said fluid selecting valve, through said pump and through said flow reversing valve into the hydraulic system for replacing the old fluid and bleeding the air out of the hydraulic system.
- 24. The method of claim 23 comprising the further step of opening a plurality of normally closed shutoff valves one at a time in a predetermined sequence, each of said shutoff valves being located in a different one of said bleeder valve 40 lines
- 25. The method of claim 23 comprising the further step of passing the fluid returning to said holding vessel from the hydraulic system through a filter.
- 26. The method of claim 23 comprising the further step of 45 attaching a vibrator to the master cylinder of the hydraulic system for loosening contaminants in the system.
- 27. The method of claim 26 comprising the further step of moving the vibrator to other components of the hydraulic system.
- 28. The method of claim 23 comprising the further steps
 - a) injecting a fluid compatible dye into the new fluid being supplied to the hydraulic system during fluid replacement and bleeding operations; and
 - b) operating an optical sensor for determining the clarity of the fluid being returned to said holding vessel during hydraulic system fluid replacement and bleeding operations and providing an indication upon detecting clear fluid.

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- 29. The method of claim 23 comprising the further step of operating an ion-selective electrode for detecting metallic ions in the fluid being returned to said holding vessel during hydraulic system fluid replacement and bleeding operations and providing an indication upon detecting the absence of the ions in the returning fluid.
- 30. The method of claim 23 comprising the further step of directing the fluid returned to said holding vessel into a waste fluid vessel after step (f).
- 31. The method of claim 23 comprising the further step of attaching a hand held nozzle to a pressure takeoff port in the master cylinder line for bench bleeding the master cylinder when the pump is being rotated in a first direction and said flow reversing valve is in the first position and for cleaning out the master cylinder when said pump is being rotated in the opposite direction and said flow reversing valve is in the first position.
 - 32. The method of claim 23 comprising the further step of moving the actuator rod of the master cylinder after step (c) and before step (d) toward the master cylinder approximately an inch to provide a fluid flow path through the master cylinder in an area which would otherwise be stagnant.
 - **33.** A method for flushing contaminants from a hydraulic system of a type having a master cylinder and other components, said method comprising the steps of:
 - a) connecting a servicing machine to the hydraulic system for moving a flushing fluid through the system; and
 - b) attaching a vibrator to the master cylinder to move contaminants in the hydraulic system into suspension within the flushing fluid.
 - 34. The method of claim 33 and comprising the additional step of moving the vibrator to the other components of the hydraulic system after step (b).
 - **35**. A method for cross-flushing a pair of hydraulic system components that are interconnected so as to be in fluid communication with each other, the method comprising the steps of:
 - a) coupling a first three-way valve to a bleeder valve of the first one of the interconnected system components and a second three-way valve to a bleeder valve of the second one of the interconnected system components;
 - b) opening the bleeder valves of the interconnected system components;
 - c) energizing a pump to draw fluid from a holding vessel and supply it to the first three-way valve;
 - d) actuating the first three-way valve to a position wherein the fluid supplied in step (c) is sequentially directed through the interconnected system components into the second three-way valve; and
 - e) actuating the second three-way valve to a position wherein the fluid received from the interconnected system components in step (d) is returned to the holding vessel.
 - **36.** The method of claim **35** comprising the further step of passing the fluid returning to said holding vessel from the second three-way valve through a filter.

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